

Title (en)
Flip-slide apparatus

Title (de)
Umschalt-/Gleitvorrichtung

Title (fr)
Appareil de pivotement/glissement

Publication
EP 0556656 B1 19960918 (EN)

Application
EP 93101740 A 19930204

Priority
US 83794692 A 19920220

Abstract (en)
[origin: EP0556656A1] The present invention provides an apparatus for receiving, in an infeed section (10), a stream of distributed articles (100), such as food items and the like, deposited in rows of like position. A slide mechanism (11) is used to retard the motion of the items (100) as they drop off the infeed section (10). In particular, the slide mechanism (11) is alternately moveable between a slide position and a flip position. In the slide position, the item drops off the edge of the belt (10) and slides across the primary slide surface (11A) and onto a second slide mechanism (12) having a secondary slide surface (12A) that is positioned to be in substantially the same plane as the primary slide surface (11A). The slide mechanism (11) is moved into the flip position for every other row of items (100). The items (100) to be flipped come off the conveyor belt (10) and come into contact with an abutting surface (11B). This surface (11B) changes the direction of the item (100) as it moves towards the transport mechanism (20) in conjunction with a reverse slide surface (12B) of the second slide mechanism (12). The item slides down the reverse slide surface (12B) on its top surface, thus flipping over at least 180 DEG from its orientation on the infeed conveyor belt (10). As a result a plurality of rows can be conveyed by the transport mechanism (20) to the filling and capping stations of an automatic sandwich making system, wherein alternate rows of food items (100) are oriented with their bottom surfaces facing upwards from the surface of the transport mechanism. <IMAGE>

IPC 1-7
A21C 15/02; **A21C 15/00**

IPC 8 full level
B65G 47/248 (2006.01); **A21C 15/00** (2006.01); **A21C 15/02** (2006.01); **B65G 47/252** (2006.01); **B65G 47/52** (2006.01)

CPC (source: EP KR US)
A21C 15/00 (2013.01 - EP US); **A21C 15/02** (2013.01 - EP US); **A23G 3/00** (2013.01 - KR); **B65G 47/252** (2013.01 - EP US)

Cited by
US5899315A; EP1344457A1; ITRM20080490A1; GB2312410A; GB2312410B; CN106172577A; GB2587358A; GB2587358B; WO9836644A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)
EP 0556656 A1 19930825; **EP 0556656 B1 19960918**; AT E142847 T1 19961015; AU 3299493 A 19930826; AU 660763 B2 19950706; DE 69304729 D1 19961024; DE 69304729 T2 19970410; DK 0556656 T3 19970310; ES 2094943 T3 19970201; GR 3022067 T3 19970331; JP 3364505 B2 20030108; JP H05338774 A 19931221; KR 100254009 B1 20000415; KR 930017499 A 19930920; US 5287953 A 19940222; US 5381883 A 19950117

DOCDB simple family (application)
EP 93101740 A 19930204; AT 93101740 T 19930204; AU 3299493 A 19930211; DE 69304729 T 19930204; DK 93101740 T 19930204; ES 93101740 T 19930204; GR 960403511 T 19961218; JP 3098293 A 19930219; KR 930002107 A 19930216; US 83794692 A 19920220; US 9942993 A 19930730